



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2013-0977; Directorate Identifier 2013-NM-190-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for all The Boeing Company Model 717-200 airplanes. This proposed AD was prompted by multiple reports of cracking in the overwing frames. This proposed AD would require repetitive inspections for cracking in the overwing frames, and corrective actions if necessary. We are proposing this AD to detect and correct such cracking, which could result in a severed frame and might increase the loading of adjacent frames, resulting in damage to the adjacent structure and consequent loss of structural integrity of the airplane.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Eric Schrieber, Aerospace Engineer, Airframe Branch, ANM-120L, Los Angeles Aircraft Certification Office (ACO), FAA, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: [eric.schrieber@faa.gov](mailto:eric.schrieber@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0977; Directorate Identifier 2013-NM-190-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory,

economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

### **Discussion**

We received multiple reports of cracking in the overwing frames on Boeing Model 717 airplanes. The airplanes had accumulated between 18,235 and 36,208 total flight hours, and between 11,991 and 45,091 total flight cycles. The cracks, caused by fatigue, originated in the upper radius of the frame inboard tab just below the floor. This condition, if not corrected, could result in a severed frame, which might increase the loading of adjacent frames and result in damage to the adjacent structure and consequent loss of structural integrity of the airplane.

### **Relevant Service Information**

We reviewed Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013. For information on the procedures and compliance times, see this service information at <http://regulations.gov> by searching for Docket No. FAA-2013-0977.

### **FAA's Determination**

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

## **Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between this Proposed AD and the Service Information.”

The FAA worked in conjunction with industry, under the Airworthiness Directives Implementation Aviation Rulemaking Committee, to enhance the AD system. One enhancement was a new process for annotating which steps in the service information are required for compliance with an AD. Differentiating these steps from other tasks in the service information is expected to improve an owner’s/operator’s understanding of crucial AD requirements and help provide consistent judgment in AD compliance. The actions specified in the service information described previously include steps that are labeled as RC (required for compliance) because these steps have a direct effect on detecting, preventing, resolving, or eliminating an identified unsafe condition.

As noted in the specified service information, steps labeled as RC must be done to comply with the proposed AD. However, steps that are not labeled as RC are recommended. Those steps that are not labeled as RC may be deviated from, done as part of other actions, or done using accepted methods different from those identified in the service information without obtaining approval of an alternative method of compliance (AMOC), provided the steps labeled as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps labeled as RC will require approval of an AMOC.

The phrase “corrective actions” is used in this proposed AD. “Corrective actions” are actions that correct or address any condition found. Corrective actions in an AD could include, for example, repairs.

### **Differences Between this Proposed AD and the Service Information**

The service bulletin specifies to contact the manufacturer for instructions on how to repair certain conditions, but this proposed AD would require repairing those conditions in one of the following ways:

- In accordance with a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) whom we have authorized to make those findings.

### **Costs of Compliance**

We estimate that this proposed AD affects 129 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Inspections	22 work-hours X \$85 per hour = \$1,870 per inspection cycle	\$0	\$1,870 per inspection cycle	\$241,230 per inspection cycle

We estimate the following costs to do any necessary replacements that would be required based on the results of the proposed inspections. We have no way of determining the number of aircraft that might need these replacements:

#### **On-condition costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>
Replacement of a frame station	126 work-hours X \$85 per hour = \$10,710	\$83,060	\$93,770

In addition, for the on-condition repairs specified in this proposed AD, we have received no definitive data that would enable us to provide cost estimates.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

### **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**The Boeing Company:** Docket No. FAA-2013-0977; Directorate Identifier 2013-NM-190-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

This AD applies to all The Boeing Company Model 717-200 airplanes, certificated in any category.

#### **(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

**(e) Unsafe Condition**

This AD was prompted by multiple reports of cracking in the overwing frames. We are issuing this AD to detect and correct such cracking, which could result in a severed frame and might increase the loading of adjacent frames, resulting in damage to the adjacent structure and consequent loss of structural integrity of the airplane.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Inspections and Corrective Actions**

At the applicable time specified in paragraph (g)(1) or (g)(2) of this AD, do a general visual inspection and a high frequency eddy current (HFEC) inspection for cracking of the left-side and right-side overwing frames at station 737, and do all applicable corrective actions, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013, except as required by paragraph (h)(3) of this AD. Do all applicable corrective actions before further flight. Except as required by paragraph (h)(2) of this AD, repeat the inspections thereafter at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013.

(1) For Group 1, Configuration 1 airplanes identified in Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013: At the time specified in table 1 of paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013, except as provided by paragraph (h)(1) of this AD.

(2) For Group 1, Configuration 2 airplanes identified in Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013: At the applicable time specified in paragraph (g)(2)(i) or (g)(2)(ii) of this AD.



(i) For airplanes on which the overwing frame has not been replaced: Within 9,300 flight cycles after accomplishing the inspections specified in Boeing Multi Operator Message (MOM) MOM-MOM-13-0375-01B, dated May 9, 2013.

(ii) For airplanes on which the overwing frame has been replaced: Within 12,000 flight cycles after replacing the frame.

**(h) Exceptions to Service Information**

(1) Where Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013, specifies a compliance time “after the original issue date of this service bulletin,” this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013, specifies to contact Boeing for the compliance time of an inspection repetitive interval, this AD requires a compliance time approved by the FAA in accordance with the procedures specified in paragraph (j) of this AD.

(3) Where Boeing Alert Service Bulletin 717-53A0036, dated August 12, 2013, specifies to contact Boeing for repair instructions, this AD requires repair before further flight using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

**(i) Credit for Previous Actions**

This paragraph provides credit for only the initial general visual inspection, HFEC inspection, and frame replacement required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Boeing Multi Operator Message (MOM) MOM-MOM-13-0375-01B, dated May 9, 2013.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in

14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in paragraph (k) of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(4) If the service information contains steps that are labeled as RC (Required for Compliance), those steps must be done to comply with this AD; any steps that are not labeled as RC are recommended. Those steps that are not labeled as RC may be deviated from, done as part of other actions, or done using accepted methods different from those identified in the specified service information without obtaining approval of an AMOC, provided the steps labeled as RC can be done and the airplane can be put back in a serviceable condition. Any substitutions or changes to steps labeled as RC require approval of an AMOC.

**(k) Related Information**

(1) For more information about this AD, contact: Eric Schrieber, Aerospace Engineer, Airframe Branch, ANM-120L, Los Angeles ACO, FAA, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5348; fax: 562-627-5210; email: [eric.schrieber@faa.gov](mailto:eric.schrieber@faa.gov).

(2) For service information identified in this AD, Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>.

Issued in Renton, Washington, on November 26, 2013.

Jeffrey E. Duven,  
Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

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